

TITLE: UMBRELLA RIBS OF A FOLDABLE UMBRELLA

BACKGROUND OF THE INVENTION

A foldable umbrella has been designed popularly, which is small
5 when it is closed that will be very convenient for people to carry or store.
It is known that a five-folded umbrella is the smallest one in newer day.
The frame of the five-folded umbrella is shown in Figure 1, which
includes the first rib (1) to the fifth rib (5) connecting with a shaft (6) as
well as branch ribs and elastic ribs. When the said umbrella is closed,
10 the third rib (3) and the fourth rib (4) will contact with each other. Since
both ribs are rigid round rod, the frame cannot be decreased the closed
volume efficiently. Hence, the umbrella is still somehow large when it
is closed.

Accordingly, the present invention is to provide an improvement of
15 umbrella ribs of a foldable umbrella, especially to a five-folded umbrella,
which can be decreased the closed volume effectively as it is closed and
folded.

BRIEF DESCRIPTION OF THE DRAWINGS

20 Figure 1 is a plan view showing a prior closed five-folded
umbrella.

Figure 2 is a plan view showing a closed five-folded umbrella
according to the present invention.

Figure 3 is a perspective view showing a rib assembly of the
25 frame of the present invention.

Figure 4 is a plan view of Figure 3.

Figure 5 is a top plan view of Figure 4.

Figure 6 to 8 are top plan views showing other embodiments according to the present invention.

5 DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

Please referring to Figure 2 to 5, the present invention relates to a five-folded umbrella, which includes a shaft (6) connecting with a frame being composed by several rib assembly. Each rib assembly includes a first rib (1), a second rib (2), a third rib (3), a fourth rib (4), a fifth rib (5),
10 and several branch ribs and elastic ribs that are similar to a prior known five-folded umbrella. It is the characteristic that the third rib (3) of the present invention is formed a bending portion (31) near to outer end of the second rib (2). So the rib assembly will not be fallen in a straight line. It can be found that when the umbrella is closed and folded, the
15 fourth rib (4) is positioned beside pivoted end of the second rib (2) and the third rib (3) instead of being stopped. Then, the whole rib assembly can be more near to the shaft (6) that decreases the closed volume of the umbrella obviously.

According to the above-mentioned spirit, the third rib (3) is
20 capable of being formed a bending portion in a reverse direction, as shown in Figure 6. Meanwhile, the fourth rib (4) is also capable of being formed a similar bending portion (41) at inner end, as in Figures 7 and 8. That can decreases the volume more effectively when the umbrella is closed and folded.

25 Hence, the invented structure according to the present invention obtains obviously improvement and should be allowed for patent.